

Two new genera of Carpenter Moths from the Palearctic

(Lepidoptera, Cossidae)

by

ROMAN V. YAKOVLEV

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Abstract: Two new genera of Cossidae (Cossinae) of the Palearctic fauna are described: *Kotchevnik* gen. nov. (type species *Cossus modestus* STAUDINGER, 1887) and *Vartiania* gen. nov. (type species *Vartiania zaratustra* spec. nov.), and three new species: *Kotchevnik durrelli* spec. nov. from Armenia, *Kotchevnik schablyai* spec. nov. from Tadjikistan, *Vartiania zaratustra* spec. nov. from from S. Iran. New combinations are proposed: *Kotchevnik modestus* (STAUDINGER, 1887) comb. nov. and *Kotchevnik tapinus* (PÜNGELER, 1898) comb. nov. A key for males of the species of the genus *Kotchevnik* gen. nov. is suggested; up-to-date knowledge on their distribution is summarized.

Резюме: В статье описываются 2 новых рода Cossidae (Cossinae) палеарктической фауны: *Kotchevnik* gen. nov. (тип рода: *Cossus modestus* STAUDINGER, 1887) и *Vartiania* gen. nov. (тип рода: *Vartiania zaratustra* spec. nov.), 3 новых вида: *Kotchevnik durrelli* spec. nov. из Армении, *Kotchevnik schablyai* spec. nov. из Таджикистана, *Vartiania zaratustra* spec. nov. из Ю. Ирана. Устанавливаются новые комбинации: *Kotchevnik modestus* (STAUDINGER, 1887) comb. nov., *Kotchevnik tapinus* (PÜNGELER, 1898) comb. nov. Приводится определительная таблица для самцов видов рода *Kotchevnik* gen. nov., рассмотрены современные данные о распространении всех исследованных видов.

As a result of my study of the Palearctic Cossidae, I describe here two new genera from Asia ranging in Iran, W. China, Armenia, Russia, Pakistan, Afghanistan, Tadjikistan, Uzbekistan, Kyrgyzstan, Turkmenistan and Kazakhstan, and three new species.

List of abbreviations

JLR – Collection of Dr. J. A. W. Lucas (Rotterdam, Netherlands)
MHUB – Natural History Museum at Humboldt University (Berlin)
MWM – Thomas Witt Museum (Munich, Germany)
MNHW – Naturhistorisches Museum (Wien, Austria)
RYB – Collection by ROMAN YAKOVLEV (Barnaul)
ZMKU – Zoological Museum at Kiev State University, Kiev
ZMMU – Zoological Museum at Moscow State University, Moscow
ZSSM – Zoologische Staatssammlung (Munich, Germany)

Kotchevnik gen. nov.

Type species: *Cossus modestus* STAUDINGER, 1887.

Description

Moth of intermediate size. Wings grey or brownish. Forewing with reticulate pattern more expressed in central and marginal wing area. Hindwing without pattern. Both wings have no closed cell. Antennae unipectinate with very small processes on articles. Female abdomen very long.

Male genitalia. Uncus triangular, gnathos arms of intermediate width, gnathos composed of two parts fused along common margin. Valva lack sclerotized crests and sharp processes on costal margin. Transtilla processus thin, pointed, fang-shaped. Juxta with a wide incision in its upper part and long lateral processes. Saccus semicircular; aedeagus thin, vesical opening occupies about half of aedeagus length in dorsal position.

Female genitalia transformed into an ovipositor.

Diagnosis of the genus

The genus belongs to the subfamily Cossinae LEACH, [1815] and is closest to two genera, *Cossus* FABRICIUS, 1793 and *Holcocerus* STAUDINGER, 1884.

From the genus *Cossus* FABRICIUS, 1793 it differs by:

1. small size.
2. very small processes on antennal articles.
3. reduction of pattern in forewing basal area.
4. specific shape of juxta.
5. distinct subdivision of valva into sclerotized proximal and membranous distal parts.
6. absence of robust sclerotized crasts on valva costal margin.
7. disposition of spores on hind legs (medial spore situated almost at $\frac{1}{2}$ of tibia length, while at $\frac{2}{3}$ in *Cossus*) (figs. 11, 12).
8. swollen epiphysis on front tibia (figs. 13, 14).

From the genus *Holcocerus* STAUDINGER, 1884 the new genus differs by:

1. an unipectinate antenna.
2. thin and long processes of transtilla.
3. absence of sharp processes on valva costal margin.
4. a much longer vesical opening.
5. a specific shape of juxta.

Range

The representatives of the new genus have been recorded in Iran, Pakistan, Afghanistan, W. China, Tadjikistan, Uzbekistan, Kyrgyzstan, Turkmenistan and Kazakhstan, Armenia and Daghestan (Russia).

Etymology

"Kotchevnik" – 'nomad' in Russian, genus masculinum.

The new genus includes two species groups.

The group *Kotchevnik modestus* (STAUDINGER, 1887) includes three species with a light hindwing and having a smooth projection on the valva costal margin: *Kotchevnik modestus* (STAUDINGER, 1887), *Kotchevnik tapinus* (PÜNGELER, 1898), *Kotchevnik durrelli* spec. nov. The group *Kotchevnik schablyai* spec. nov. includes one species with a darkened hindwing and a practically straight valva costal margin.

Key for species of the genus *Kotchevnik* gen. nov. based on outer characters and male genitalia

- 1 (6) Hindwing upperside light-grey of white, costal margin with a semicircular projection
- 2 (5) Forewing length not less than 14 mm, forewing upperside light-gray or brown with a fine reticulate ornament; juxta lower margin with an incision. Central Asia.
- 3 (4) Hindwing upperside almost white; valva distal end quite sharply narrowed, membranous part of valva larger *Kotchevnik modestus* (STAUDINGER, 1887)
- 4 (3) Hindwing upperside greyish with a more or less expressed dark border; valva distal end quite narrowed less sharply, membranous part of valva smaller *Kotchevnik tapinus* (PÜNGELER, 1898)
- 5 (2) Forewing length as a rule less than 14 mm, forewing upperside grey with a fine and distinct dark-grey pattern, juxta lower margin without a noticeable incision. Armenia. *Kotchevnik durrelli* spec. nov.
- 6 (1) Hindwing upperside brown, valva costal margin almost straight. *Kotchevnik schablyai* spec. nov.

Species review

Kotchevnik modestus (STAUDINGER, 1887) **comb. nov.** (colour plate XVIII, figs. 1, 2; text figs. 1, 2; map 1).

Cossus modestus STAUDINGER, 1887, Stett. Ent. Ztg. 48: 88.

DANIEL (1956): 274–275.

SCHOORL (1990): 50–51.

HUA et al. (1990): 122.

Material

MHUB:

Typus: ♂, Kuldja.

MWM:

1 ♂, Kazakhstan, Almaatinskaya oblast', Ugurskij Distr., Charyn R., Chundzha env., 26.–28.VI.1990, PŁUSCH leg.; 2 ♂♂, SO Kazakhstan, Charyn River valley, at Chundzha, lum., 25.VI.1990, I. KOSTJUK leg.; 2 ♂♂, 29.VI.1992, SO Kazakhstan, Charyn River valley, at Chundzha, lum., I. KOSTJUK leg.; 1 ♂, 1 ♀, 12.VI.1992, SO Kazakhstan, Charyn River valley, at Chundzha, lum., 25.VI.1990, I. KOSTJUK leg.; 2 ♂♂, 7.–9.VII.1994, SO Kazakhstan, Charyn River valley, at Chundzha, lum., I. KOSTJUK leg.; 3 ♂♂, Kazakhstan E., S. Altai, Narynsky Mt Range., 2100 m, 21.VI.2000., leg. KLIMENKO; 1 ♂, 1 ♀, "Kazakhstan, Zaisan-Stadt-See, 15–30.VI.1990., ex coll.

SCHINTLMEISTER; [Saison]"; NE Kazakhstan, "Panfilov – Ili geb.", 44.10° N, 80.00° E, 21.VI.1988, ex coll. SCHINTLMEISTER; SE Kazakhstan, 50 km S-W of Dzarkent, at Ili River, lum., 19.VII.1994, I. KOSTJUK leg.; 15 ♂♂, 9 ♀♀, "S Kazakhstan, Syr-Darja Fluss, 50 km W. Aris", 25.–26.V.1996, LUKHTANOV leg.; 5 ♂♂, 3 ♀♀, "S. Kazakhstan, Tchimkent, Tshardara, Syr-Darja Fluss, 200 m, 22.–25.VI.1996, leg. LUKHTANOV, ex coll. SCHINTLMEISTER"; 1 ♀, Kazakhstan, Tshimkent District, Syr-Darya river, Bairkum, 250 m, 22.–30.V.1994, LUKHTANOV; 19 ♂♂, "Kazakhstan, Taldy-Kurgan reg., Ili fluss, Borochudsir, 500 m, 7.–12.VI.1996, leg. LUKHTANOV, ex coll. SCHINTLMEISTER"; 2 ♂♂, "Kazakhstan, Ili geb., Bakanas, 20.V.1992, 100 km N. Alma-Ata, 500 m, ex coll. SCHINTLMEISTER"; 7 ♂♂, 4 ♀♀, Kazakhstan, Bakanas, 600 m, 24.V.1992, M. DANILEVSKY leg.; 2 ♂♂, Kazakhstan, Zailiiskii Mts, Karaturuk gorge, 90 km E. of Alma-Ata, 1500 m, 10.V. 1999., ZHDANKO leg.; 4 ♂♂, 1 ♀, Kazakhstan, Alma-Ata prov., 22 km N of Masak, 78.27° E, 43.17° N, 21.VI.1996, FABIAN & NADAI leg.; 1 ♀, Kazakhstan, Alma-Ata prov., Kamenka, 1360 m, 76.73° E, 43.15° N, 22.VII.1995, leg. FABIAN; 9 ♂♂, Kyrgyzstan, Syrdarinsky Karatau Mtr., Belekul' lake, 23.VI.1999; 4 ♂♂, Kyrgyzstan, Alai Mts., 70 km S. of Kyzyl-Kiya, Maidan, 12.–30.VII.1997, DOLIN, PLUSCH leg.; 2 ♂♂, Kyrgyzstan, Dzhelal-Abad reg., 10 km E fr. Kalmak-Kirchin, Kok-Art river, 9.–14.VI.1999; 21 ♂♂, "Kirgisien, Naryn-Suusamy Mts., Kokmeren, 1500 m, 6–7.07. 1996., leg. LUKHTANOV, ex coll. SCHINTLMEISTER"; 5 ♂♂, 1 ♀, Kyrgyzstan, S. Issyk-Kul', Kadzhi-Sai, 1.07.2000., 1800 m, CHURKIN S. leg.; 2 ♂♂, 2 ♀♀, "Kirgizstan, Naryn fluss, Ak Tal Tschat, 1610 m, 1.VII.1996, leg. LUKHTANOV, ex coll. SCHINTLMEISTER"; 1 ♂, Inn. Tian-Shan, Naryn valley, Kazarmen vic., 1400, 21.VII.2000, S. CHURKIN leg.; 3 ♂♂, "Kirgizia, Suusamy Mts., Kobyk fluss, 2200 m, 9.VII.1996, leg. LUKHTANOV"; 2 ♂♂, Kirgizia, Fergansky Mts, Alash valley, 1100 m, 6.VII.1999, DOLIN & PLUSCH leg.; 5 ♂♂, Kirgiskii Mts, S slopes of Karakul, Balykty River, 2500 m, 17.VII.1999; 2 ♂♂, Inn. Tian-Shan, 15 km E of Naryn, 2250 m, 21.VII.2000, Kenesh vill.; 2 ♂♂, S. Kyrgyzstan, Toktogul lake, 15 km NE Karakul vill, 1300–1400 m, 17.VI.2000, S. CHURKIN leg.; 3 ♂♂, Kyrgyzstan, Alai Mts., Tengizbai river, 3500 m, 10.–20.VII.1997, S. TOROPOV leg.; 1 ♂, Kyrgyzstan, Alai Mts., 20 km E Uch-Kurvan, 13.VII.1993, 1300 m; 2 ♂♂, Uzbekistan, Chatkal Mts, Arkit, 1400 m, 5.VIII.1983, MURZIN leg.; 1 ♂, Uzbekistan, Chimgan Mts., 800–2000 m, 18.–25.VII.1990, GYULAI & HREBLAY leg.

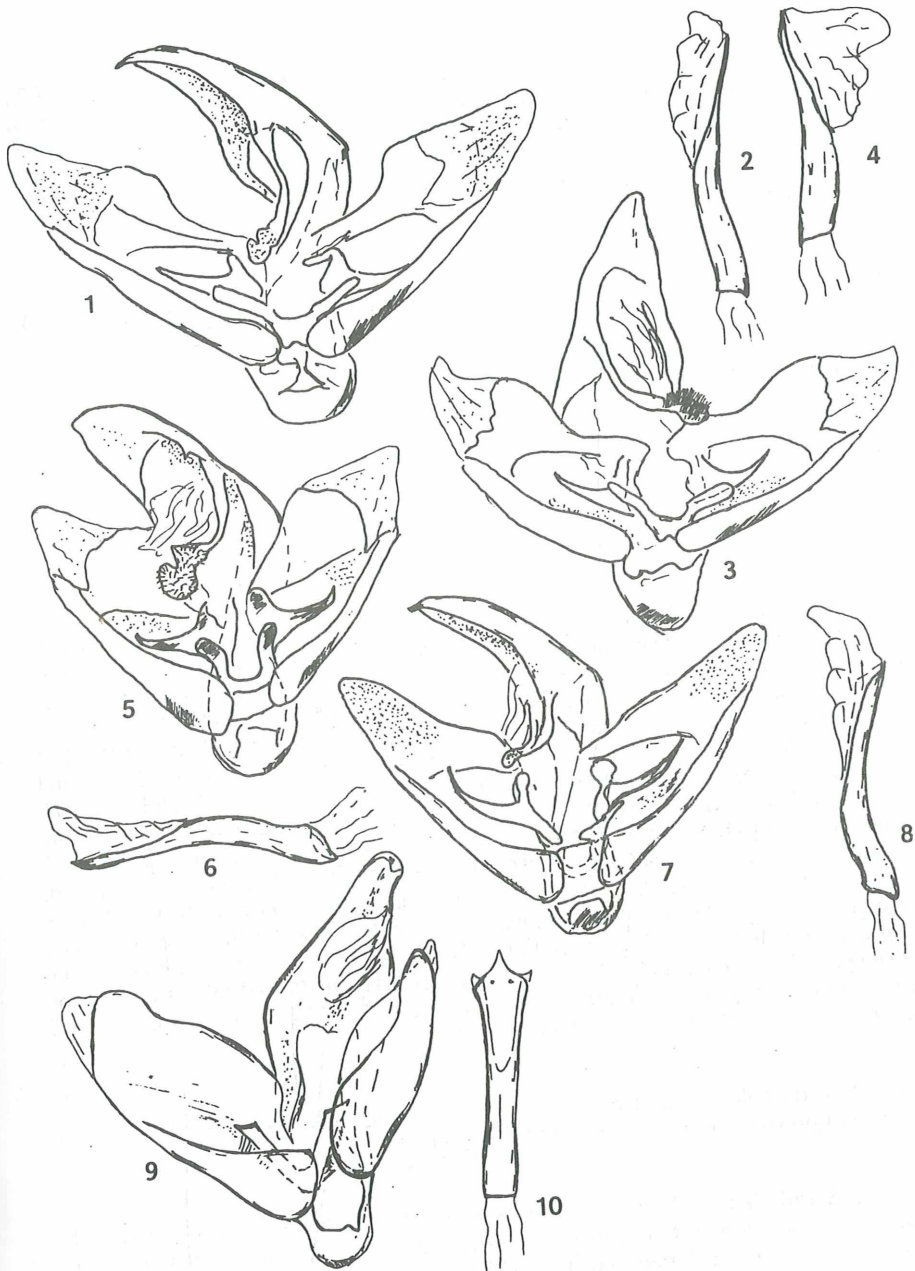
ZMMU (TZVETAEV coll.):

5 ♂♂, Kazakhstan, Alma-Atinskaya oblast', Ili River, Ilijsk; 3 ♂♂, Kyrgyzstan, Alaiskii Mts, Gul'cha River, 95 km on Osh;

JLR:

2 ♂♂, SE Kazakhstan, Ketmen, Tuyuk, V.1993, A. SALDAITIS leg.; 8 ♂♂, 1 ♀, SE Kazakhstan, Bakanas, V.1993, SALDAITIS leg.

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- Fig. 1: Male genitalia of *Kotchevnik modestus* (STAUDINGER, 1887) frontal projection.
 Fig. 2: Aedeagus of *Kotchevnik modestus* (STAUDINGER, 1887) lateral projection.
 Fig. 3: Male genitalia of male of *Kotchevnik tapinus* (PÜNGELER, 1898) frontal projection.
 Fig. 4: Aedeagus of *Kotchevnik tapinus* (PÜNGELER, 1898) lateral projection.
 Fig. 5: Male genitalia of *Kotchevnik durrelli* spec. nov., frontal projection.
 Fig. 6: Aedeagus of *Kotchevnik durrelli* spec. nov., lateral projection.
 Fig. 7: Male genitalia of *Kotchevnik schablyai* spec. nov., frontal projection.
 Fig. 8: Aedeagus of *Kotchevnik schablyai* spec. nov., lateral projection.
 Fig. 9: Male genitalia of *Vartiania zaratustra* spec. nov., frontal projection.
 Fig. 10: Aedeagus of *Vartiania zaratustra* spec. nov., frontal projection.



RYB:

1 ♂, Kazakhstan – W, Ustyurt plateau, 3 km S from the Aktau-Beineu road, 25.–26.V.2002., leg. KARALIUS V. and MIATLEUSKI J.; 1 ♂, 1 ♀, Kazakhstan – W, Mangystau dist., 40 km SE from the Beyneu, 20.V.2002., leg. KARALIUS V. and MIATLEUSKI J.; 1 ♂, SW Kazakhstan, Uigur distr., 15 km SW Chundzha, Yasenevaya Rostcha village, 28.V.1992, USTYUZHANIN P., leg.; 7 ♂♂, S Kyrgyzstan, Alaikii Mt. range, Isfraim-Sai, 1700 m, 3.VII.1998., I. PLYUSTCH; 1 ♂, Kyrgyzstan, Naryn river, near Kara-Kul', 15.VII.1996, I. PLYUSTCH.

Kotchevnik tapinus (PÜNGELER, 1898) **comb. nov.** (colour plate XVIII, fig. 3; text figs. 3, 4; map 1).

Cossus tapinus PÜNGELER, 1898, Soc. ent. **13**: 57.

DANIEL (1956): 273.

Material**MHUB:**

Typus – ♂, "Transcaspian, Merw, Sefir-kuh, 1895"

MWM:

1 ♂, "Transcaspian, Merw, O. GATNAR"; 5 ♂♂, Turkmenia, Kopet-Dag Mts., 800–1500 m, valleys of the rivers Ipay-Kala and Point-Kala, 59°54'–57'E, 38°13'–15'N, 30.VI.–04.VII.1992, B. FABIAN, B. HERCZIG, A. PODLUSSANY and Z. VARGA leg.; 3 ♂♂, 1 ♀, Turkmenistan, Kopet-Dagh Mts., 1000 m, Sayvana valley, ca. 5 km SW of Saivana, 56°50'E, 38°17'N, 28.VI.1992, B. FABIAN, B. HERCZIG, A. PODLUSSANY and Z. VARGA leg.; 1 ♂♂, Turkmenistan, Kopet-Dagh Mts., 10 km S of Aidere, 27.VI.1992, 600–1000 m, 56°46'E, 38°14'N, B. FABIAN, B. HERCZIG, A. PODLUSSANY and Z. VARGA leg.; 1 ♂, Turkmenistan, Kopet-Dagh Mts., 400–600 m, Firyuza, 58°05'E, 37°59'N, 25.VI.1992, B. FABIAN, B. HERCZIG, A. PODLUSSANY and Z. VARGA leg.; 3 ♂♂, Turkmenistan, W. Kopet-Dagh, Kara-Kala, 14.–17.VI.1993, ex coll. SCHINTLMEISTER; 2 ♂♂, Turkmenia, Kara-Kum desert, 200–300 m, SE of Tedjen, 38°56'N, 60°53'E, 12.V.1991, DANILEWSKY leg.; 1 ♂, Tadzhikistan, „Tigrovaya Balka“, 1.–10.VIII.2000. 1 ♂, "Iran, Beloudzhistan, Strasse Khach – Zahedan, Fort Sengan, 1800 m, 1938, coll. BRANDT. GenPr Het 9104 (MWM). 1 ♂, Iran, Fars, Firouzabad, Afzar, 16.IV.1953., leg. KOSCH KOULI, GenPr Het 9249 (MWM); 1 ♂, Afghanistan, Kabul Umg., 29.IX.51, leg. DERELE, HEYDEMANN Kiel, GenPr Het 9105 (MWM); 2 ♂♂, Afghanistan, Iran Grenze, Umg. Kohsan, 1000 m, 13.V.77., DE FREINA; 3 ♂♂, Iran, Semnar prov., 28 km S of Meiamel, 1560 m, 7.V.2000, SZABO & HENTSCHER leg.

ZSSM:

1 ♂, West Pakistan, Salt Range, Chingi, 4.III.1956, CH. LINDEMANN leg. TZVETAEV coll.; 2 ♂♂, SW Tadzhikistan, Tigrovaja Balka reserve; 3 ♂♂, SW Tadzhikistan, Vaksch Valley;

RYB:

6 ♂♂, 2 ♀♀, S Tadzhikistan, Tigrovaya balka reserve, 11.–14.V.2001., LEGEZIN O. leg.; 1 ♂, Tadzhikistan, Gissar, Schlucht, Majchura, 2000 m, 7.VIII.1999., YU. STCHETKIN leg.; 4 ♂♂, Tadzhikistan, Babatag Mts., Dzhartepa, 30.VI.2003., V. SHABLYA leg.

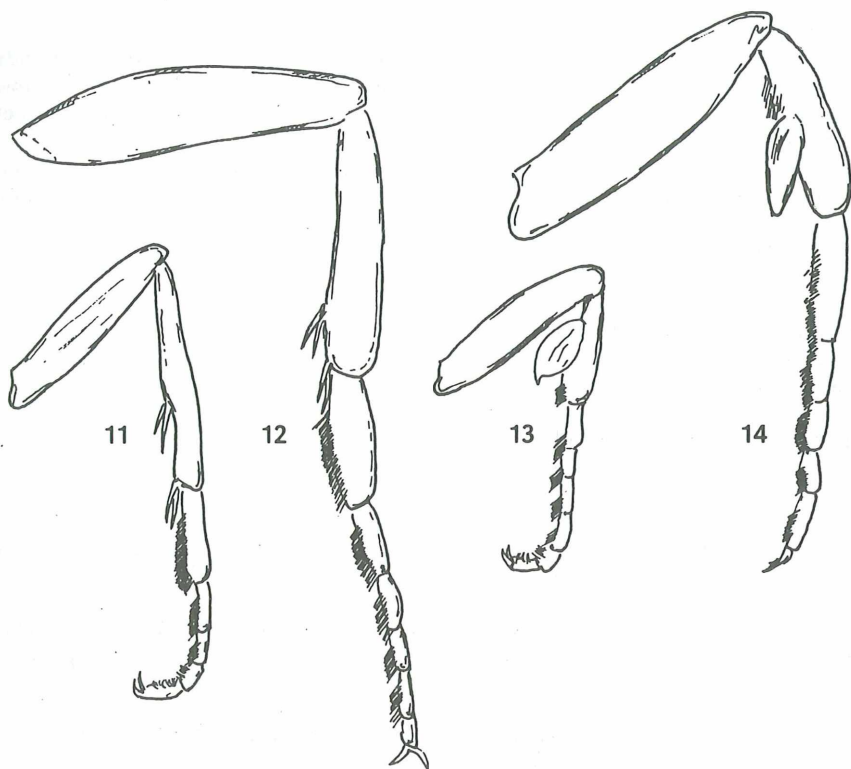


Fig. 11: Hind leg of male of *Kotchevnik modestus* (STAUDINGER, 1887), lateral projection.

Fig. 12: Hind leg of male of *Cossus cossus* (LINNAEUS, 1758), lateral projection.

Fig. 13: Front leg of male of *Kotchevnik modestus* (STAUDINGER, 1887), lateral projection.

Fig. 14: Front leg of male of *Cossus cossus* (LINNAEUS, 1758), lateral projection.

Kotchevnik durrelli spec. nov.

(colour plate XVIII, fig. 4; text figs. 5, 6; map. 1)

Material

Holotype ♂: Armenia, Garni, 26.VI.1995, P. KAZARYAN (Gen.Pr. Het. 9110 – MWM).

Paratypes

MWM: 1 ♂, Armenia, Tejarabak vill., VII.96, DANCHENKO leg. (Gen.Pr. Het. 9255 – MWM).

MNHW (coll. VARTIAN): 3 ♂♂, "26. u. 27.07.1976, Russ. Armenien, Gerhard, 1700 m, 40 km östl. Eriwan, KASY & VARTIAN."

RYB: 12 ♂♂, Armenia, Garni, 26.VI.1995, KAZARYAN P.

ZMKU: 1 ♂, Daralagez (Armenia), pag Azizbekov (Pashalu), ca. 1650 m alt., lum, 22.VII.1938, L. SHELJUZHKO, N. PAVLITZKAJA leg.

Description

Male. Forewing length 13–14 mm. Forewing apex somewhat pointed, forewing upperside dark-grey without a pattern in its basal part and with a reticulate pattern of very narrow transversal lines in medial and marginal parts. There is a weakly expressed ochre-colored spot in basal area below discal cell.

Male genitalia. Uncus triangular, valva with a broad semicircular projection on its costal margin. Arms of transtilla diverging, slightly curved. Juxta with a wide base, bears lateral processes. Aedeagus of a shape usual for the genus.

Female unknown.

Diagnosis

Differs from other species of its group by:

1. smaller size.
2. somewhat pointed forewing.
3. darker forewing.
4. slightly curved arms of transtilla.
5. absence of incision on juxta lower margin.

Range

Armenia, ?Daghestan.

Note

A record of *Cossus modestus* STAUDINGER, 1887 for Daghestan (ZAGULYAEV, 1978), most probably refers to *Kotchevnik durrelli* spec. nov.

Etymology

The new species is named in the honour of the famous naturalist writer GERALD DURRELL.

Kotchevnik schablyai spec. nov.

(colour plate XVIII, figs. 5, 6; text figs. 7, 8, map 1)

Material

Holotype ♂: Tadjikistan, Karategin ridge [Range], Sangikar ravine [Gorge], 1700 m, 2.–10.VIII.1969, STCHETKIN leg. (MWM).

Paratypes

MWM: 7 ♂♂, 1 ♀, Tadjikistan, Karategin Range, Sangikar Gorge, 1700 m, 2.–10.VIII.1969, STCHETKIN leg.; 31 ♂♂, 1 ♀, Tadjikistan, Karategin Range, Sangikar Gorge, 14 km N of Novabad, 1700 m, 18.–26.VII.1969, STCHETKIN leg. (GenPr Het 9113 – MWM); 1 ♂, Tadjikistan, Karategin Range, Sangikar Gorge, 18 km N of Novabad, 1700 m, woody slope, 20.VIII.1969, STCHETKIN leg. (GenPr Het 9111 – MWM); 1 ♂, Tadjikistan, Karategin Range, Sangikar Gorge, 18 km N of Novabad, 1700 m, woody slope, 15.VIII.1969, STCHETKIN leg. (GenPr Het 9253 – MWM); 3 ♂♂, 1 ♀, Tadjikistan, Karategin Range, Sangikar Gorge, 1700 m, 3.–20.V.1972, STCHETKIN leg.; 2 ♂♂, Tadjikistan, Karategin Range, Sangikar Gorge, 1700 m, 4.VI.1969, STCHETKIN leg.; 9 ♂♂, Tadjikistan, Karategin Range, Sangikar Gorge, 1700 m, 29.VI.1971, STCHETKIN leg.

RYB: 45 ♂♂, 3 ♀♀, Tadzhikistan, Vakhshskii Mt. Range, Sarykhsor [Sorikhsor village, r. bank of Shurobdar'ya river, H – 1300 m, 69°49'39" E; 38°32'35" N], VII.1999, Yu. Stchetkin leg.

Description

Forewing length 14–17 mm. Forewing upperside brown, with a rounded apex and a pattern characteristic for the genus. Hindwing evenly dark-brown.

Male genitalia. Valva gradually tapering to apex and not bearing processes or crests on its costal margin. Arms of transtilla thin and strongly curved. Juxta arms long, juxta base narrow. Aedeagus of a shape usual for the genus.

Female somewhat larger and darker than the male, abdomen very long due to genitalia transformed into an ovipositor.

Diagnosis

The new species is well defined by:

1. a wider forewing.
2. a dark hindwing.
3. specific shape of valva and arms of transtilla and juxta.

Range

The species is known only from Tadzhikistan (the Karategin Range).

Etymology

The new species is named after the amateur entomologist V. SHABLYA who for many years has been collecting in Tadzhikistan.

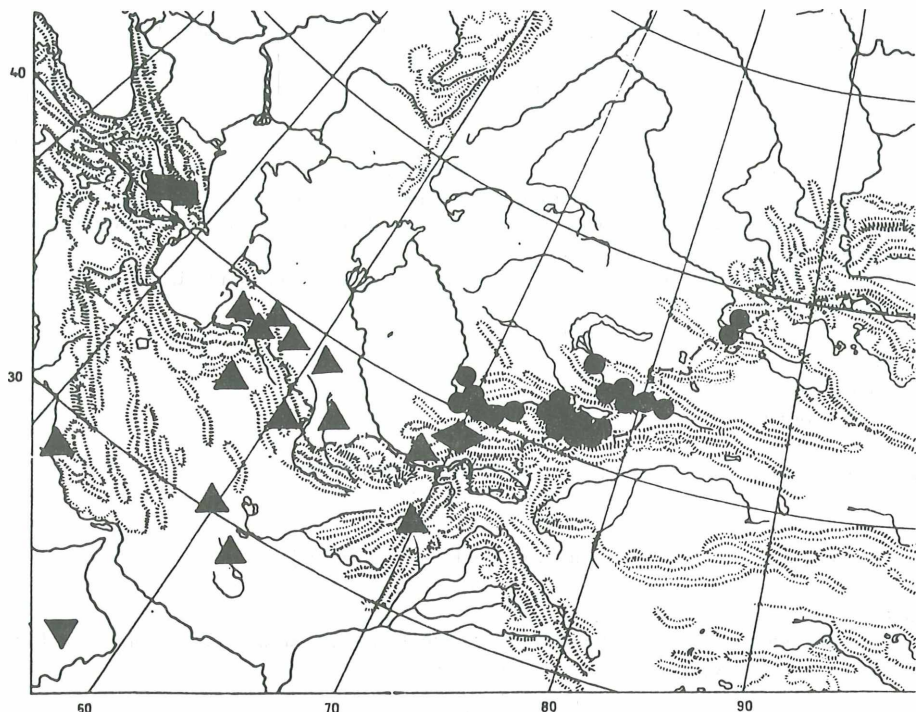
***Vartiania* gen. nov.**

Type species: *Vartiania zaratustra* spec. nov.

Description

Moths of intermediate shape. Antennae without processes on articles, appressed dorso-ventrally. Body covered with a dense pubescence of grayish hairs. Forewing grey with a reticulate pattern; hindwing light with a weak reticulate pattern in the submarginal area. Forewing with a rounded apex. Venation similar to that of *Holcocerus* STAUDINGER, 1884, however medial veins are weakly developed.

Male genitalia. Uncus elongate, with a blunt apex sclerotized at its very tip. Tegumen triangular. Gnathos arms thin. Gnathos spade-shaped, composed of two fused blades, densely covered with small spinules. Valva costal margin strongly sclerotized and bears a wide projection on inner surface. Valvae strongly asymmetrical in size, the right one being longer and wider. Valva apex membranous. Arms of transtilla strongly reduced being small fang-like teeth. Juxta triangular, bears long and wide lateral processes with skewed apices. These processes throughout their lengths are fused with the inner surfaces of the valvae by quite a strong membrane, that restricts full spread of the valvae. Saccus present, semicircular. Aedeagus straight, strongly sclerotized and in its distal part armed with wide pointed lateral processes



Map 1: Distribution of Cossidae: ● - *Kotchevnik modestus* (STAUDINGER, 1887), ▲ - *Kotchevnik tapinus* (PÜNGELER, 1898), ■ - *Kotchevnik durrelli* spec. nov., ◆ - *Kotchevnik schablyai* spec. nov., ▼ - *Vartiania zaratustra* spec. nov.

and small wart-like ventral prominences. Vesica opening occupies about $\frac{1}{3}$ of aedeagus length in its dorsal position.

Diagnosis

The genus belongs to the subfamily Cossinae LEACH, [1815]. It differs from the close genus *Holcocerus* STAUDINGER, 1884 in the following characters:

1. reduced arms of transtilla.
2. fusion of juxta processes to valvae.
3. asymmetrical valvae.
4. peculiar aedeagus armament.

Range

So far known only from the type locality of its type species, S. Iran.

Etymology

Frau EVA VARTIAN - an entomologist from Vienna, genus feminine.

Vartiania zaratustra spec. nov.

(colour plate XVIII, fig. 7; text figs. 9, 10; map 1)

Material

Holotype ♂: S. Iran, Hormozgan Prov., Beshagerd Mts., 26°34'N, 57°54'E, 600 m, Davari, 6.–11.IV.2000, SINYAEV et PLUTENKO leg., ex coll. A. SCHINTLMEISTER (MWM).

Paratypes: 2 ♂♂, S. Iran, Hormozgan Prov., Beshagerd Mts., 26°34'N, 57°54'E, 600 m, Davari, 6.–11.IV.2000, SINYAEV et PLUTENKO leg., ex coll. A. SCHINTLMEISTER (GenPr Het 9282, 9296 – MWM).

Description

Forewing length 12–13 mm. Forewing with a rounded apex, grey with a reticulate pattern composed of dark winding stripes; by intensity rather conspicuous are a dark band and a dark spot of irregular shape at outer margin. Hindwing light with a weak reticulate pattern in submarginal area.

Male genitalia: see description of the genus.

Female unknown.

Range

So far found only in S. Iran, Hormozgan Prov.

Etymology

The new species is named after the ancient Iranian prophet ZARATUSHTRA.

Acknowledgements

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References

- DANIEL, F. (1956): Monographie der palaearctischen Cossidae. II. Die Genera *Cossus* FABR. und *Lamellocossus* gen. n. (Lep.). – Mitt. Münch. Ent. Ges. **46**: 243–289, pls. 8–10.
- HUA, B., CHOU, I., FANG, D. & S. CHEN (1990): The Cossid fauna of China (Lepidoptera, Cossidae). – 147 pp., Tianze Eldonejo, Yangling, Shaanxi, China.
- SCHOORL, J. W. (1990): A phylogenetic study on Cossidae (Lepidoptera: Ditrysia) based on external adult morphology. – 295 pp, 1 t., Zoologische Verhandelingen **263**.
- ZAGULYAEV, A. E. (1978): Cossidae. – *Opredelitel' nasecomyh evropeiskoi chasti SSSR* [The key of insects of european part of USSR] Vol. IV Lepidoptera (1): 177–186 (in russian).

Explanation of colour plate XVIII (p. 481):

Fig. 1: *Kotchevnik modestus* (STAUDINGER, 1887) ♂, Typus (MHUB).

Fig. 2: *Kotchevnik modestus* (STAUDINGER, 1887) ♀, Kazakhstan, Tshimkent Ditric, Syr-Darya river, Bairkum, 250 m, 22.–30.V.1994, LUKHTANOV (MWM).
 Fig. 3: *Kotchevnik tapinus* (PÜNGELER, 1898) ♂, Typus (MHUB).
 Fig. 4: *Kotchevnik durrelli* spec. nov. ♂, holotype (MWM).
 Fig. 5: *Kotchevnik schablyai* spec. nov., ♂, holotype (MWM).
 Fig. 6: *Kotchevnik schablyai* spec. nov. ♀, paratype (MWM).
 Fig. 7: *Vartiania zaratustra* spec. nov. ♂, holotype (MWM).

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address of the author

Dr. ROMAN V. YAKOVLEV
 57–81, Chkalova str.
 Barnaul, 656049
 Russia
 e-mail: yakovlev_r@mail.ru

YAKOVLEV, R. V.: Two new genera of Carpenter Moths from the Palaearctic (Lepidoptera, Cossidae). – *Atalanta* **35** (3/4): 357–368.

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Colour plate XVIII

